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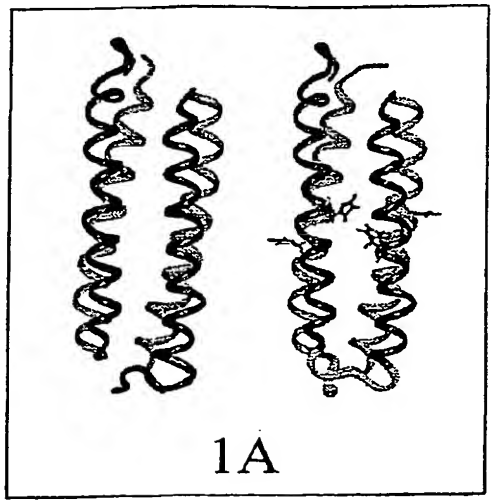
Declaration under Rule 4.17:
— *as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii)) for all designations*

[Continued on next page]

(54) Title: ENGINEERING REDOX PROTEINS



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(57) Abstract: The protein of this invention comprises a 4-α-helix bundle motif formed from the α-helices of rop (repressor of primer) and a redox centre. In this invention the redox centre is preferably haem and the iron is preferably coordinated to the α--helices of the rop structure via histidine residues. Such a protein is very stable and has the same specific activities as natural redox proteins with increased stability in the interaction with electrode surfaces. Also provided by this invention is a method of engineering proteins to develop redox proteins from structures which previously had no redox functions.

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